

Changes in flow Regime: The Minimal Degradation Alternative is expected to reduce base flows and peak flows to a lesser degree than the preferred alternative in the downstream section of the unnamed tributary to Piney Creek due to the retention characteristics of the proposed sediment and quality control ponds. Runoff from the project or disturbed areas presently contributing to stream flow will be directed to sediment ponds. However, the tributary, which has intermittent flow during summer months have no downstream users. The tributary discharges into Piney Creek, a tributary of Captina Creek. Since the affected area drained by the unnamed tributary represents a small percentage of the Captina Creek drainage basin, there should not be any recognizable difference in quantity flow in Captina Creek. It is predicted that the proposed operation will not result in any significant adverse impacts on surface water quantity in the area.

The Ohio Department of Natural Resources has no record of rare, threatened, endangered or protected species in the project area (See Wetlands Delineation Report, Section 3.5).

#### **NON-DEGRADATION ALTERNATIVE**

##### **Magnitude of Proposed Lowering of Water Quality:**

Changes to Aquatic Life and Wildlife Habitat: There would be no lowering of water quality by using the Non-Degradation Alternative.

Change in Chemical Water Quality: There are no changes in water quality anticipated as a result of the Non-Degradation Alternative.

Changes in flow Regime: There are no changes in flow regime anticipated as a result of the Non-Degradation Alternative.

**10C.** *Include a discussion of the technical feasibility, cost effectiveness, and availability. In addition, the reliability of each alternative shall be addressed (including potential recurring operational and maintenance difficulties that could lead to increased surface water degradation. (OAC 3745-1-05 (C)(6)(h, j-k) and OAC 3745-1-54).*

#### **PREFERRED ALTERNATIVE**

##### **Technical Feasibility:**

The proposed project is designed for disposal of coarse coal refuse in an environmentally acceptable manner. The site will be constructed to comply with the rules and regulations of the State of Ohio, Ohio EPA Policies 2.05 and 4.16, and U.S. Mining Safety and Health Administration 30 CFR 77.215 and 77.216. Valley fills are a common and excepted way of disposing of large volumes of coal waste materials and have been technically proven though out the coal bearing regions.

Permanent control measures and facilities include diversion ditches, benching side slopes and establishing vegetative cover over final fill surfaces. Permanent diversion ditches will be constructed to divert runoff from the working area. The east side is protected by the diversion system along the plant road. Control ditches and structural benches will contain runoff from the project area thereby preventing flows from freely discharging over side slopes. Waterways susceptible to erosion will be protected by vegetation or riprap. The final fill surface will be clay capped, covered with soil, seeded and mulched. A permanent stand of grass will be established to mitigate erosion and sedimentation and serve as a wildlife habitat.